REMARKS

The Applicants thank the Examiner for his thorough reading of the application. The following comments are directed toward the Office Action of June 1, 1994. Claims 1-20 are pending in the application. Claims 9-17 are withdrawn currently from consideration. Claim 20 is amended herein. No new matter has been added.

Outstanding issues:

- The specification has been objected to and all claims have been rejected under 35 U.S.C. § 112, first paragraph.
 - Claim 20 stands rejected under 35 U.S.C. § 112, second paragraph.
- Claims 1-8 and 18-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Kogan et al.

35 U.S.C. § 112, Second Paragraph

Claim 20 stands rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner finds the last three lines of claim 20 to be vague and indefinite. Claim 20 has been amended herein to resolve the ambiguity.

In light of the amendments, Applicants respectfully request reconsideration of claim 20, and removal of the rejection under 35 U.S.C. § 112, second paragraph.

35 U.S.C. § 112, First Paragraph

The Examiner objects to the specification and rejects all claims under 35 U.S.C. § 112, first paragraph, for failing to provide an enabling disclosure. Specifically, the Examiner contends that Applicants added new matter in their Response of September 1991 by reciting that all primers in a reaction have similar melt characteristics. The

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Examiner has agreed with Applicants that amending Table 1 to include melt temperature values for hybridization between primers and their complements was not new matter. Applicants assert that Table 1 discloses not only the melt temperatures inherent to the primers and their complements, but discloses an inherent range of melt temperatures used in the invention. In addition, page 16, lines 25-34, of the disclosure relates information regarding the importance of melt temperature: "[t]he temperature is dependent on the length, the uniqueness of the primer sequence and the relative percentage of GC bases. The longer the primers, the higher the temperature needed. The more unique the sequence, the lower the temperature needed to amplify. GC rich primers need higher temperatures to prevent cross hybridization and to allow unique amplification. However, as the AT percentage increases, higher temperatures cause these primers to melt. Thus, these primers must be lengthened for the reaction to work." (emphasis added). Applicants contend that this information, in conjunction with the melt temperature range disclosed in Table 1, would have taught persons skilled in the art that similar melt temperatures use critical to the practice of the claimed invention.

It is well established that prohibited new matter does not include that which was inherently disclosed in the original disclosure, In re Nathan, 328 F.2d 1005, 1008-09 (CCPA 1964). The invention claimed in an application does not have to be described in ipsis verbis in order to satisfy the description requirement of § 112, Ralston Purina Co. v. Far-Mar-Co., 772 F.2d 1575, 1578 (Fed. Cir. 1985). For a disclosure to be inherent, it must lead one skilled in the art to the critical limitation, Id., see also Fox Indus. Inc. v. Structural Preservation Sys. Inc., 6 U.S.P.Q.2d 1577, 1585 (D. Md., 1988. Thus, the test for determining whether the disclosure complies with the written description of the invention requirement is whether the disclosure of the application reasonably conveys to one of ordinary skill in the art that the inventor had possession at that time of the subject matter, rather than the presence or absence of literal support in the specification, In re Kaslow, 707 F.2d 1366, 1375 (Fed. Cir. 1983); and Ralston Purina Co. v. Far-Mar-Co., 772 F.2d at 1578.

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Applicants contend that the property that all primers have similar melt characteristics was inherently disclosed. Table 1, with the reported melt characteristics for each primer, would have led one skilled in the art to the later-claimed limitation, particularly in light of the information disclosed on page 16 of the specification. Given that the test is whether the disclosure would have reasonably conveyed to one of ordinary skill that the inventors had possession of the invention with the later-claimed limitation, Applicants assert that there is no doubt that the limitation that all primers have similar melt characteristics was inherently disclosed.

In light of the above remarks, Applicants respectfully request reconsideration of all claims, and removal of the objection to the specification and rejection of the claims under 35 U.S.C. § 112, first paragraph.

35 U.S.C. § 103

All claims stand rejected under 35 U.S.C. § 103 as being unpatentable over Kogan et al. Applicants argue that the primer melt range disclosed in the present invention distinguishes the instant invention over Kogan et al., whereas the Examiner argues that this argument is moot due to the objection and rejections under 35 U.S.C. § 112, first paragraph. Applicants contend that in light of the remarks made above regarding the new matter rejection, that the limitation that all primers have similar melt characteristics was inherently disclosed and is not new matter. Therefore, the present application is distinguishable from Kogan et al., and the rejection under 35 U.S.C. § 103 is improper.

Applicants respectfully request that the Examiner withdraw the moot objection and consider Applicants' arguments on the merits in order that all issues are narrowed and ripe for appeal.

In light of the above remarks, and those made regarding the rejections under 35 U.S.C. § 112, first paragraph, above, Applicants respectfully request reconsideration of all claims, and removal of the rejections under 35 U.S.C. § 103.

Applicants assert that in view of the above amendments and remarks, the application is now in condition for allowance. Accordingly, Applicants respectfully request that a letters patent be issued on the application as amended. If any requirements remain, please contact the undersigned at (713) 651-5325 for speedy resolution.

Date: 8/24/94

Respectfully submitted,

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